Junk et al.
Lead-Lag Input Filter Arrangement For Electro-Pneumatic
Control Loops
Attorney Docket No. 06005/561655
Sheet 1 of 5 (Figs. 1 and 2)

FIG. 1

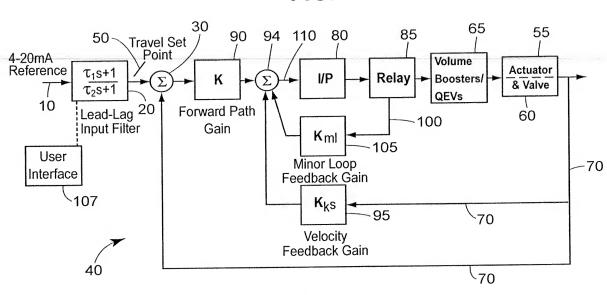
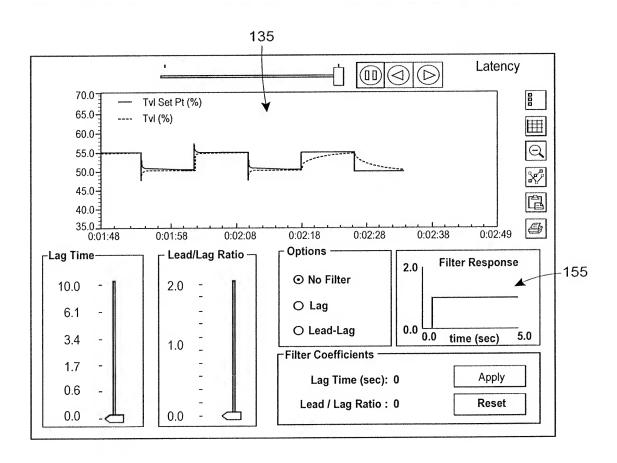


FIG. 2 310 315 320 130 120 (00)Latency 360 囲 355 Q 350 345 自 340 230 335 220 228 Lead/Lag Ratio **Options** Opening-Closing -Lag Time-Filter Response 2.0 O No Filter -150 210 O Lag -10.0 O Lead-Lag 200 1.5 1.5_ 3.7 O Aysm. Lead-Lag 0.0 0.0 5.0 time (sec) 1 1.4 205 Filter Coefficients 0.5 214 0.5 Lag Time: xxx sec 0.5 Apply Opening Ratio: xxx 0.2 -216 0 Reset Closing Ratio: xxx A 212 207 200 209 200

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FIG. 3

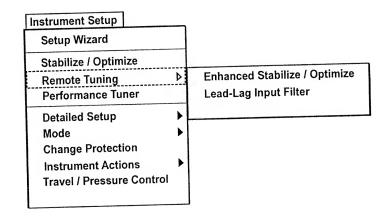


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FIG. 4

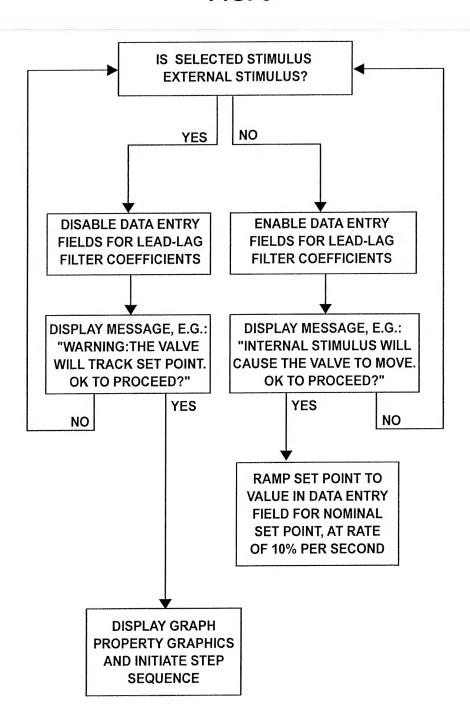
○ValveLink Stimulus (Square Wave)	
Nominal Set Point (%)	
Step Size (%)	
Step Hold Time (sec)	

FIG. 7



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FIG. 5



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LEAD/LAG RATIO **EAD/LAG RATIO** LEAD/LAG RATIO LEAD/LAG RATIO DISABLE USER DISABLE USER DISABLE USER **ENABLE USER** FOR CLOSING FOR CLOSING FOR CLOSING FOR CLOSING INTERFACE INTERFACE NTERFACE NTERFACE CONTROL CONTROL CONTROL CONTROL CLOSING LEAD/LAG RATIO VALUE STORED RATIO SET TO N DATABASE **USER INPUTS** RATIO VALUE LEAD/LAG LEAD/LAG **LEAD/LAG** LEAD/LAG RATIO SET RATIO SET CLOSING CLOSING CLOSING CLOSING TO 0.0 TO 0.0 **.EAD/LAG RATIO .EAD/LAG RATIO** LEAD/LAG RATIO **.EAD/LAG RATIO** DISABLE USER DISABLE USER **ENABLE USER ENABLE USER** FOR OPENING FOR OPENING FOR OPENING FOR OPENING INTERFACE NTERFACE INTERFACE NTERFACE CONTROL CONTROL CONTROL CONTROL **EAD/LAG RATIO OPENING** VALUE STORED RATIO SET TO N DATABASE **USER INPUTS** RATIO VALUE LEAD/LAG RATIO SET LEAD/LAG LEAD/LAG RATIO SET LEAD/LAG OPENING **OPENING** OPENING **OPENING** TO 0.0 TO 0.0 FOR CHANGING FOR CHANGING FOR CHANGING FOR CHANGING DISABLE USER **ENABLE USER ENABLE USER ENABLE USER** INTERFACE INTERFACE NTERFACE INTERFACE AG TIME -AG TIME CONTROL AG TIME AG TIME CONTROL CONTROL CONTROL LAG USER INPUTS **USER INPUTS USER INPUTS** ASYMMETRIC | | VALUE FOR VALUE FOR VALUE FOR VALUE SET LAG TIME LAG TIME SECONDS LAG TIME LAG TIME TO 0.0 LEAD-LAG ► LEAD-LAG NONE P LAG WHICH FILTER TYPE OPTION IS SELECTED DETERMINE